

# Analogy & Classification

## ANALOGY

The meaning of analogy is 'similar properties' or similarity. If an object or word or digit or activity shows any similarity with another object or word or digit or activity in terms of properties, type, shape, size, trait etc., then the particular similarity will be called analogy. For example, cricket : ground and chess : table are the analogous pairs (why?). In fact, both pairs of words have similar relationship in terms of place of playing as cricket is played in the ground and similarly chess is played on the table. In this chapter, we will discuss different types of analogy because problems based on analogy are an important category of questions to be asked in almost all examinations of competitive level.

## TYPES OF ANALOGY

### 1. Tool & Object Based Analogy

This establishes a relationship between a tool and the object in which it works. Similar relations has to be discovered from answer choices.

#### Examples:

Scissors	:	Cloth
Saw	:	Wood
Eraser	:	Paper

### 2. Synonym Based Analogy

In such type of analogy two words have similar meaning.

#### Examples:

Huge	:	Gigantic
Endless	:	Eternal
Benevolent	:	Kind
Notion	:	Idea

### 3. Worker & Tool Based Analogy

This establishes a relationship between a particular tool and the person of that particular profession who uses that tool.

#### Examples:

Writer	:	Pen
Painter	:	Brush
Cricketer	:	Bat
Barber	:	Scissors

### 4. Worker & Product Based Analogy

This type of analogy gives a relationship between a person of particular profession and his/her creations.

#### Examples:

Writer	:	Book
Author	:	Novel
Singer	:	Song
Poet	:	Poem

### 5. Causes & Effect Based Analogy

In such type of analogy 1st word acts and the 2<sup>nd</sup> word is the effect of that action.

#### Examples:

Work	:	Tiredness
Bath	:	Freshness
Race	:	Fatigue
Shoot	:	Kill

### 6. Opposite Relationship (Antonym) Based Analogy

In such type of analogy the two words of the question pair are opposite in meaning. Similar relations has to be discovered from the answer choice word pairs.

#### Examples:

Poor	:	Rich
Fat	:	Slim
Tall	:	Short
Big	:	Small

### 7. Gender Based Analogy

In such type of analogy, one word is masculine and another word is feminine of it. In fact, it is a 'male and female' or 'sex' relationship.

#### Examples:

Man	:	Woman
Bull	:	Cow
Duck	:	Drake

### 8. Classification Based Analogy

This type of analogy is based on biological, physical, chemical or any other classification. In such problems the 1<sup>st</sup> word may be classified by the 2<sup>nd</sup> word and vice-versa.

#### Examples:

Oxygen	:	Gas
Water	:	Liquid
Snake	:	Reptile
Parrot	:	Bird

### 9. Function Based Analogy

In such type of analogy, 2<sup>nd</sup> word describes the function of the 1<sup>st</sup> word.

#### Examples:

Singer	:	Sings
General	:	Commands
Player	:	Plays
Surgeon	:	Operates

## 10. Quantity and Unit Based Analogy

In such type of analogy 2<sup>nd</sup> word is the unit of the first word and vice-versa.

### Examples:

Distance	:	Mile
Mass	:	Kilogram
Length	:	Meter

## 11. Finished Product & Raw Material Based Analogy

In such type of analogy the 1<sup>st</sup> word is the raw material and 2<sup>nd</sup> word is the end product of that raw material and vice-versa.

### Examples:

Yarn	:	Fabric
Milk	:	Curd
Flour	:	Bread
Latex	:	Rubber
Grape	:	Wine
Fruit	:	Juice

## 12. Utility Based Analogy

In such type of analogy the 2<sup>nd</sup> word shows the purpose of the 1<sup>st</sup> word or vice-versa.

### Examples:

Pen	:	Writing
Food	:	Eating
Chair	:	Sitting
Bed	:	Sleeping

## 13. Symbolic Relationship Based Analogy

In such type of analogy, the 1<sup>st</sup> word is the symbol of the 2<sup>nd</sup> word and vice-versa.

### Examples:

White	:	Peace
Red	:	Danger
Black	:	Sorrow
Red cross	:	Hospital

## 14. Adult & Young One Based Analogy

In such type of analogy, the 1<sup>st</sup> word is the adult one and 2<sup>nd</sup> word is the young one of the 1<sup>st</sup> word or vice-versa.

### Examples:

Cow	:	Calf
Human	:	Child
Dog	:	Puppy
Duck	:	Duckling

## 15. Subject & Specialist Based Analogy

In such type of analogy the 2<sup>nd</sup> word is the specialist of 1<sup>st</sup> word (subject) or vice-versa.

### Examples:

Heart	:	Cardiologist
Skin	:	Dermatologist

## 16. Habit Based Analogy

In this type of analogy 2<sup>nd</sup> word is the habit of 1<sup>st</sup> and vice-versa.

### Examples:

Cat	:	Omnivorous
Tiger	:	Carnivorous
Cow	:	Herbivorous

## 17. Instrument and Measurement Based Analogy

We see in this type of analogy, the 1<sup>st</sup> word is the instrument to measure the 2<sup>nd</sup> word and vice-versa:

### Examples:

Hygrometer	:	Humidity
Barometer	:	Pressure
Thermometer	:	Temperature
Sphygmomanometer	:	Blood pressure

## 18. Individual & Group Based Analogy

Second word is the group of 1<sup>st</sup> word (or vice-versa) in such type of analogy.

### Examples:

Cow	:	Herd
Sheep	:	Flack
Grapes	:	Bunch
Singer	:	Chorus

## 19. State & Capital Based Analogy

1<sup>st</sup> word is the state and 2<sup>nd</sup> word is the capital of that state (1<sup>st</sup> word) (or vice-versa) in the analogy like this.

### Examples:

Bihar	:	Patna
West Bengal	:	Kolkata
Maharashtra	:	Mumbai
Karnataka	:	Bengaluru

**Note:** Analogy based on country and capital is very similar to this type of analogy in which we put name of the country in place of the name of state and country capital in place of state capital. For example India: New Delhi and Nepal : Kathmandu.

## 20. Analogy Based on Individual & Dwelling Place

In such type of analogy 1<sup>st</sup> word is the individual & 2<sup>nd</sup> word is the dwelling place of that individual (1<sup>st</sup> word) and vice-versa.

### Examples:

Horse	:	Stable
Bee	:	Apiary
Dog	:	Kennel
Birds	:	Aviary

## 21. Analogy Based on Worker and Working Place

In this type of analogy the 1<sup>st</sup> word represents a person of particular profession and 2<sup>nd</sup> word represents the working place of that person (1<sup>st</sup> word) and vice-versa.

### Examples :

Doctor	:	Hospital
Clerk	:	Office
Cook	:	Kitchen
Professor	:	College

## 22. Analogy Based on Topic Study

1<sup>st</sup> word is the study of the 2<sup>nd</sup> word (or vice-versa) in the analogy like this.

**Examples:**

Birds	:	Ornithology
Earth quakes	:	Seismology
Eggs	:	Zoology

## 23. Analogy Based on Letters (or Meaningless Words)

**Case I :** (Forward alphabetical sequence)

**Examples:**

CD : FG :: PQ : UV

Here CD and FG are in the natural alphabetical sequence. Similarly, PQ & UV are in the natural alphabetical sequence.

**Case II:** (Backward or opposite alphabetical sequence)

**Example:**

DC : GF :: QP : VU

In fact this case is opposite of case I

**Case III:** (Vowel – consonant relation)

**Example**

ATL : EVX :: IPR : ORS

Here, the 1<sup>st</sup> two words start with the 1<sup>st</sup> two vowels A & E and the next two words start with the next two vowels I & O. Last two letter of every word are consonants.

**Case IV:** Example (Skip letter relation)

ABC : FGH :: IJK : NOP

Here between ABC & FGH two letters skip and they are D & E. Similarly, between IJK & NOP two letters skip and they are L & M.

**Case V:** (Jumbled letters relation)

**Example:**

- (i) LAIN : NAIL :: EVOL : LOVE

Here the 1<sup>st</sup> term gets reversed to produce the 2<sup>nd</sup> term and similar relation is shown in between 3<sup>rd</sup> and 4<sup>th</sup> term.

- (ii) ABCD : OPQR :: WXYZ : KLMN

In (ii) each letter of the 1<sup>st</sup> group 'ABCD' is moved fourteen steps forward to obtain the corresponding letter of the 2<sup>nd</sup> group 'OPQR'. A similar relation is established between the third group 'WXYZ' and the fourth group 'KLMN.'

**NOTE :** Every type of analogy discussed in (23) may have different variations of problems and you can get perfection on them by proper practice only.

**EXAMPLE** 1. Lion is to flesh as cow is to .....

- (a) snake (b) grass  
(c) worm (d) animal  
(e) None of these

**Sol.** Lion eats flesh, similarly, cow eats grass. Hence option (b) is the right answer.

**EXAMPLE** 2. Pen : Writer :: ..... : Batsman

- (a) Brush (b) Fighter  
(c) Stick (d) Bat  
(e) None of these

**Sol.** Option (d) is the correct answer because a writer uses pen to write and similarly a batsman uses bat to play.

**EXAMPLE** 3. NCDP : ODEQ :: ..... : MPRO

- (a) LOQN (b) NQOL  
(c) OQNL (d) QNOL  
(e) None of these

**Sol.** Option (a) is the correct answer as letters of 1<sup>st</sup> term go one step forward to be the 2<sup>nd</sup> term. Similarly, the letters of 3<sup>rd</sup> term will go one step forward to be the 4<sup>th</sup> term (Letters of step go one step backward to be the 3<sup>rd</sup> term).

**EXAMPLE** 4. Bulky : Fat :: Happiness : ?

- (a) Bad (b) Ugly  
(c) Joy (d) Sorrow  
(e) None of these

**Sol.** (c) is the correct option because 'Bulky' is the synonym of 'Fat' and similarly 'Happiness' is the synonym of 'joy'.

Now, we can say that we have discussed almost all type of analogy to be asked frequently in the examinations. But examinees must prepare for any surprise kind of problems while solving the problems under this segment. But by practicing more & more, you can be master in solving these problems. Only keep in mind the following:

- (1) You must have strong word power.
- (2) You must have good understanding & reasoning ability.
- (3) You must have good general knowledge.

## CLASSIFICATION

When we come to solve the reasoning part while preparing for any competitive examination of objective nature. We find that the problems based on classification are the very important segment. You can see such questions in every question paper and this is the reason why examinees are advised to be well aware of classification part of reasoning. In this chapter, efforts have been made to make, examinees of various objective competitive examinations, fully aware of reasoning based on classification.

## WHAT IS CLASSIFICATION?

You must have in your mind that what does classification mean. In fact, in classification we take out an element out of some given elements and the element to be taken out is different from the rest of the elements in terms of common properties, shapes, sizes, types, nature, colours, traits etc. In this way the rest of the elements form a group and the element that has been taken out is not the member of that group as this single element does not possesses the common quality to be possessed by rest of the elements. For example, if we compare the elements like, lion, cow, tiger, panther, bear and wolf then we find that this is a group of animals. How do we classify them? To understand this let us see the presentation given below :-

Lion	Cow	Tiger	Panther	Bear	Wolf
↓	↓	↓	↓	↓	↓
Wild animal	Domestic animal	Wild animal	Wild animal	Wild animal	Wild animal



#### 4. General Knowledge Based Classification

Such classification is done on the basis of our general knowledge. No doubts that this is a word based classification but without having general knowledge this type of questions can not be solved.

**EXAMPLE** 10. Find the odd man out.

- |                    |              |
|--------------------|--------------|
| (a) Patna          | (b) Mumbai   |
| (c) Kolkata        | (d) Bangluru |
| (e) Madhya Pradesh |              |

**Sol.:** Option (e) is the correct answer because Madhya Pradesh is an Indian state while all other options are capitals of Indian states. Patna is the capital of Bihar; Mumbai is the capital of Maharashtra; Kolkata is the capital of West Bengal and Bangluru is the capital of Karnataka. In case of Madhya Pradesh (it is an Indian state), we can say that it has its capital in Bhopal.

**EXAMPLE** 11. Which of the following animals does not fit into the group formed by remaining four animals?

- |           |             |
|-----------|-------------|
| (a) Cat   | (b) Dog     |
| (c) Tiger | (d) Octopus |
| (e) Lion  |             |

**Sol.:** Option (d) is the correct option as this is the only animal out of given options which is a water animal. Rest of the options are land animals.

Now, this chapter has come to an end. Readers are advised to move as per the following steps while solving the problems related to classification :-

**Step I:** See all the given options with a serious eye.

**Step II:** Try to make relation of similarity among the given options.

**Step III:** Find out the one word not having the common similarity like other four options and that one word will be your answer.

# EXERCISE

- Which of the following is related to 'Melody' in the same way as 'Delicious' is related to 'Taste'?  
(a) Memory (b) Highness  
(c) Tongue (d) Speak  
(e) Voice
- In a certain way 'Diploma' is related to 'Education'. Which of the following is related to 'Trophy' in a similar way?  
(a) Sports (b) Athlete  
(c) Winning (d) Prize  
(e) None of these
- Marathon is related to race, in the same way 'Hibernation' is related to \_\_\_\_  
(a) laugh (b) burn  
(c) freeze (d) sleep  
(e) flow
- "Illness" is related to "Cure" in the sameway as "Grief" is – related to  
(a) Happiness (b) Ecstasy  
(c) Remedy (d) Solitude  
(e) Consolation
- 'Yard' is related to inch, in the sameway 'quart' is related to  
(a) gram (b) ounce  
(c) gallon (d) pound  
(e) None of these
- 'Bouquet' is related to 'Flowers' in the same way as 'sentence' is related to  
(a) Letters (b) Paragraph  
(c) Content (d) Words  
(e) Construction
- Which of the following relates to FLOWER in the same way as RTERBN relates to SECTOR?  
(a) RWLGPF (b) EOFKUQ  
(c) EOFMXS (d) RWLEPD  
(e) RWLEND
- 'Income' is related to 'Profit' in the same way as 'Expenditure' is related to  
(a) Sale (b) Receipts  
(c) Surplus (d) Loss  
(e) Balance
- 'Electricity' is related to 'Wire' in the same way as 'Water' is related to  
(a) Bottle (b) Jug  
(c) River (d) Pipe  
(e) None of these
- 'Hospital' is related to 'Nurse' in the same way as 'Court' is related to  
(a) Justice (b) Lawyer  
(c) Judgement (d) Trial  
(e) None of these
- 'Frame work' is related to 'House' in the same way as 'Skeleton' is related to which of the following?  
(a) Ribs (b) Skull  
(c) Body (d) Grace  
(e) None of these

**Directions (Qs. 12-61) :** In each of the following questions, there are two words / set of letters / numbers to the left of the sign :: which are connected in some way. The same relationship obtains between the third words / set of letters / numbers and one of the four alternatives under it. Find the correct alternative in each question.

- Ocean : Water :: Glacier : ?  
(a) Refrigerator (b) Ice  
(c) Mountain (d) Cave  
(e) None of these
- PRLN : XZTV :: JLFH : ?  
(a) NPRT (b) NRPT  
(c) NTRP (d) RTNP  
(e) None of these
- DRIVEN : EIDRVN :: BEGUM : ?  
(a) EUBGM (b) MGBEU  
(c) BGMEU (d) UEBGM  
(e) None of these
- Medicine : Sickness :: Book : ?  
(a) Ignorance (b) Knowledge  
(c) Author (d) Teacher  
(e) None of these
- Bank : River :: Coast : ?  
(a) Flood (b) Waves  
(c) Sea (d) Beach  
(e) None of these
- ACE : HIL :: MOQ : ?  
(a) XVT (b) TVX  
(c) VTX (d) TUX  
(e) None of these
- NUMBER : UNBMER :: GHOST : ?  
(a) HOGST (b) HOGTS  
(c) HGOST (d) HGSOT  
(e) None of these
- Court : Justice :: School : ?  
(a) Teacher (b) Student  
(c) Ignorance (d) Education  
(e) None of these
- Breeze : Cyclone :: Drizzle : ?  
(a) Earthquake (b) Storm  
(c) Flood (d) Downpour  
(e) None of these
- 3 : 27 :: 4 : ?  
(a) 140 (b) 75  
(c) 100 (d) 64  
(e) None of these
- Foresight : Anticipation :: Insomnia : ?  
(a) Treatment (b) Disease  
(c) Sleeplessness (d) Unrest  
(e) None of these
- Ocean : Pacific :: Island : ?  
(a) Greenland (b) Ireland  
(c) Netherland (d) Borneo  
(e) None of these

24. 12 : 30 :: 20 : ?  
 (a) 25 (b) 32  
 (c) 35 (d) 42  
 (e) None of these
25. 3 : 10 :: 8 : ?  
 (a) 10 (b) 13  
 (c) 14 (d) 17  
 (e) None of these
26. 13 : 19 :: ? : 31  
 (a) 21 (b) 23  
 (c) 25 (d) 26  
 (e) None of these
27. 48 : 122 :: 168 : ?  
 (a) 284 (b) 286  
 (c) 288 (d) 290  
 (e) None of these
28. TSR : FED :: WVU : ?  
 (a) CAB (b) MLK  
 (c) PQS (d) GFH  
 (e) None of these
29. CJDL : FMGR :: IKJR : ?  
 (a) OQPT (b) RSTU  
 (c) LSNT (d) KRMO  
 (e) None of these
30. BCDA : STUR :: KLMJ : ?  
 (a) VWXU (b) EFHG  
 (c) SRTU (d) QSRP  
 (e) None of these
31. ACBD : EFGH :: OQPR : ?  
 (a) STUV (b) RSTU  
 (c) UVWX (d) QRST  
 (e) None of these
32. CEG : EGC :: LNP : ?  
 (a) LPN (b) UWY  
 (c) NPL (d) MOP  
 (e) None of these
33. KLM : PON :: NOP : ?  
 (a) LMK (b) MLK  
 (c) NML (d) KLN  
 (e) None of these
34. ACE : FGH :: LNP : ?  
 (a) QRS (b) PQR  
 (c) QST (d) MOQ  
 (e) None of these
35. 211 : 333 :: 356 : ?  
 (a) 358 (b) 359  
 (c) 423 (d) 388  
 (e) None of these
36. Length : Metre :: Power : ?  
 (a) Calories (b) Degree  
 (c) Watt (d) Kilogram  
 (e) None of these
37. Square : Cube :: Circle : ?  
 (a) Ellipse (b) Parabola  
 (c) Cone (d) Sphere  
 (e) None of these
38. Paper : Tree :: Glass : ?  
 (a) Window (b) Sand  
 (c) Stone (d) Mirror  
 (e) None of these
39. ACFJ : ZXUQ :: EGIN : ?  
 (a) VUSQ (b) VRPM  
 (c) UTRP (d) VTRM  
 (e) None of these
40. ACEG : DFHJ :: QSUW : ?  
 (a) TVXZ (b) TQST  
 (c) MNPR (d) EGLJ  
 (e) None of these
41. EGIK : FILO :: FHJL : ?  
 (a) JGMP (b) JGPM  
 (c) GJPM (d) GJMP  
 (e) None of these
42. 10 : 91 :: 9 : ?  
 (a) 69 (b) 72  
 (c) 89 (d) 97  
 (e) None of these
43. 7 : 56 :: 9 : ?  
 (a) 63 (b) 81  
 (c) 90 (d) 99  
 (e) None of these
44. 20 : 50 :: 100 : ?  
 (a) 150 (b) 250  
 (c) 200 (d) 156  
 (e) None of these
45. Voyage : Sea sickness :: Heights : ?  
 (a) Ship (b) Travel  
 (c) Giddiness (d) Motion  
 (e) None of these
46. Waitress : Restaurant :: ?  
 (a) Doctor : Nurse (b) Driver : Truck  
 (c) Teacher : School (d) Actor : Role  
 (e) None of these
47. AROUND : RAUODN :: GROUND : ?  
 (a) RGUODN (b) NDOOGR  
 (c) OUNDGR (d) DNUURG  
 (e) None of these
48. APPROACHED : ROACHEDAPP :: BARGAINED : ?  
 (a) AINEDBARG (b) GAINEDBAR  
 (c) GAINEDRAB (d) RABGAINED  
 (e) None of these
49. 8 : 256 :: ?  
 (a) 7 : 343 (b) 9 : 243  
 (c) 10 : 500 (d) 5 : 75  
 (e) None of these
50. 21 : 3 :: 574 : ?  
 (a) 23 (b) 82  
 (c) 97 (d) 113  
 (e) None of these
51. Saint : Meditation :: Scientist : ?  
 (a) Research (b) Knowledge  
 (c) Spiritual (d) Rational  
 (e) None of these
52. King : Palace :: Eskimo : ?  
 (a) Caravan (b) Asylum  
 (c) Monastery (d) Igloo  
 (e) None of these
53. AFKP : DINS :: WBGL : ?  
 (a) ORUX (b) OSPA  
 (c) OTYD (d) OQSU  
 (e) None of these

54. SINGER : QGLECP :: MONSTER : ?  
 (a) KLNSCP (b) KLMSCP  
 (c) KMLQRCP (d) KLMTDO  
 (e) None of these
55. 18 : 5 :: 12 : ?  
 (a) 4 (b) 10  
 (c) 3 (d) 6  
 (e) None of these
56. Haematology : Blood :: Phycology : ?  
 (a) Fungi (b) Fishes  
 (c) Algae (d) Diseases  
 (e) None of these
57. Pride of Lions :: \_\_\_\_\_ of cats  
 (a) Herd (b) School  
 (c) Clowder (d) Bunch  
 (e) None of these
58. MAN : PDQ :: WAN : ?  
 (a) ZDQ (b) NAW  
 (c) YQD (d) YDQ  
 (e) None of these
59. AEFJ : KOPT :: ? : QUVZ  
 (a) GLKP (b) GKLP  
 (c) HLKP (d) HKQL  
 (e) None of these
60. 2 : 32 :: 3 : ?  
 (a) 243 (b) 293  
 (c) 183 (d) 143  
 (e) None of these
61.  $D \times H : 4 \times 8$  as  $M \times Q : ?$   
 (a)  $12 \times 17$  (b)  $12 \times 16$   
 (c)  $13 \times 17$  (d)  $14 \times 18$   
 (e) None of these
- Directions (Qs. 62-97):** Four of the following five are alike in a certain way and so form a group. Which is the one that **does not** belong to that group?
62. (a) 29 (b) 85  
 (c) 147 (d) 125  
 (e) 53
63. (a) Crow (b) Vulture  
 (c) Bat (d) Ostrich  
 (e) Eagle
64. (a) Food : Hunger (b) Water : Thirst  
 (c) Air : Suffocation (d) Talent : Education  
 (e) Leg : Lameness
65. (a) 126 (b) 122  
 (c) 65 (d) 50  
 (e) 170
66. (a) 226 (b) 290  
 (c) 360 (d) 170  
 (e) 122
67. (a) Rice (b) Wheat  
 (c) Barley (d) Mustard  
 (e) Bajra
68. (a) Arrow (b) Sword  
 (c) Knife (d) Axe  
 (e) Pistol
69. (a) 169 (b) 179  
 (c) 135 (d) 149  
 (e) 157
70. (a) Kiwi (b) Eagle  
 (c) Emu (d) Ostrich  
 (e) Penguins
71. (a) 72 (b) 42  
 (c) 152 (d) 110  
 (e) 156
72. (a) Aluminium (b) Copper  
 (c) Mercury (d) Iron  
 (e) Zinc
73. (a) 143 (b) 63  
 (c) 195 (d) 15  
 (e) 257
74. (a) Producer (b) Director  
 (c) Investor (d) Financier  
 (e) Entrepreneur
75. (a) Jackal (b) Cheetah  
 (c) Tiger (d) Lion  
 (e) Dog
76. (a) Cheese (b) Butter  
 (c) Milk (d) Curd  
 (e) Ghee
77. (a) 131 (b) 151  
 (c) 181 (d) 171  
 (e) 161
78. (a) Anxiety (b) Anger  
 (c) Sorrow (d) Joy  
 (e) Feeling
79. (a) Touch : Skin (b) Tongue : Taste  
 (c) Hear : Ears (d) See : Eye  
 (e) Smell : Nose
80. (a) 170 (b) 226  
 (c) 120 (d) 290  
 (e) 362
81. (a) BROTHER : DORVEHT  
 (b) ENGLISH : GGNSIJ  
 (c) ANOTHER : CONVEHT  
 (d) BETWEEN : DTEZEEP  
 (e) HUSBAND : JSUDNAF
82. (a) ISLOJ (b) LUOQM  
 (c) AKDGB (d) FPILG  
 (e) NXQTO
83. (a) Pear (b) Jackfruit  
 (c) Watermelon (d) Papaya  
 (e) Mango
84. (a) 131 (b) 133  
 (c) 143 (d) 87  
 (e) 57
85. (a) 168 (b) 728  
 (c) 290 (d) 380  
 (e) 120
86. (a) Swan (b) Crocodile  
 (c) Frog (d) Snake  
 (e) Chicken
87. (a) PY8 (b) EK5  
 (c) RV3 (d) DG2  
 (e) JR6
88. (a) Liberty (b) Society  
 (c) Equality (d) Fraternity  
 (e) None of these



- |     |                   |                |     |                   |                  |
|-----|-------------------|----------------|-----|-------------------|------------------|
| 89. | (a) DWFU          | (b) EVHS       | 94. | (a) Pathology     | (b) Geology      |
|     | (c) HSKP          | (d) KQNN       |     | (c) Cardiology    | (d) Radiology    |
|     | (e) None of these |                |     | (e) None of these |                  |
| 90. | (a) CBEF          | (b) EDGH       | 95. | (a) Rivulet       | (b) Stream       |
|     | (c) IHKL          | (d) GFHJ       |     | (c) River         | (d) Pond         |
|     | (e) None of these |                |     | (e) None of these |                  |
| 91. | (a) 4025          | (b) 7202       | 96. | (a) Konark        | (b) Madurai      |
|     | (c) 6023          | (d) 5061       |     | (c) Dilwara       | (d) Ellora       |
|     | (e) None of these |                |     | (e) None of these |                  |
| 92. | (a) 96 : 80       | (b) 64 : 48    | 97. | (a) Fervent       | (b) Enthusiastic |
|     | (c) 80 : 60       | (d) 104 : 78   |     | (c) Apathetic     | (d) Ardent       |
|     | (e) None of these |                |     | (e) None of these |                  |
| 93. | (a) Radio         | (b) Television |     |                   |                  |
|     | (c) Transistor    | (d) Tube       |     |                   |                  |
|     | (e) None of these |                |     |                   |                  |

### ANSWER KEY

1	(e)	12	(b)	23	(a)	34	(a)	45	(c)	56	(c)	67	(d)	78	(e)	89	(a)
2	(a)	13	(d)	24	(d)	35	(d)	46	(c)	57	(c)	68	(e)	79	(b)	90	(d)
3	(d)	14	(b)	25	(d)	36	(c)	47	(a)	58	(a)	69	(a)	80	(c)	91	(d)
4	(c)	15	(a)	26	(b)	37	(d)	48	(b)	59	(b)	70	(b)	81	(d)	92	(a)
5	(b)	16	(c)	27	(d)	38	(b)	49	(c)	60	(a)	71	(c)	82	(b)	93	(d)
6	(d)	17	(d)	28	(b)	39	(d)	50	(b)	61	(c)	72	(c)	83	(c)	94	(b)
7	(e)	18	(d)	29	(a)	40	(a)	51	(a)	62	(c)	73	(e)	84	(a)	95	(d)
8	(d)	19	(d)	30	(a)	41	(d)	52	(d)	63	(c)	74	(b)	85	(d)	96	(d)
9	(d)	20	(d)	31	(a)	42	(b)	53	(c)	64	(d)	75	(e)	86	(e)	97	(c)
10	(b)	21	(d)	32	(c)	43	(c)	54	(c)	65	(a)	76	(c)	87	(e)		
11	(c)	22	(c)	33	(b)	44	(b)	55	(c)	66	(c)	77	(e)	88	(b)		

# Hints & Explanations

1. (e) 'Delicious' is the adjective used for 'Taste'. Similarly, 'Melodious' is the adjective used for 'Voice'.
2. (a) A successful finish of 'Education' equips one with 'Diploma'. Similarly, a successful finish in 'Sports' equips one with 'Trophy'.
3. (d) Marathon is a form of long race in the same way hibernation is lengthy period sleep or inactivity.
4. (c) Cure ensures removal of illness in the same way as remedy insures removal of grief.
5. (b) Yard is bigger unit of inch (1 yard = 36 inches) in the same way quart is bigger unit of ounce (1 quart = 32 ounces)
6. (d) Bouquet is a bunch of flowers. Similarly, Sentence is a set of words that is complete in itself.
7. (e)
 

S E C T O R	F L O W E R
-1      -1      -1	-1      -1      -1
R T E R B N	R W L E N D
8. (d) When Income is more than expenditure, it bears Profit. But when Expenditure is more than income, then loss occurs.
9. (d) Wire is the medium to transmit Electricity. Similarly, Pipe is the medium to carry Water.
10. (b) Here, the first is the working place of the second.
11. (c) Framework is foundation on which house is built. Similarly, body is built around skeleton.
12. (b) First consists of the second.
13. (d) As                                      Similarly,  

P $\xrightarrow{+8}$ X	J $\xrightarrow{+8}$ R
R $\xrightarrow{+8}$ Z	L $\xrightarrow{+8}$ T
L $\xrightarrow{+8}$ T	F $\xrightarrow{+8}$ N
N $\xrightarrow{+8}$ V	H $\xrightarrow{+8}$ P
14. (b) Fifth and third letters of the first term are first and second letters of the second term and first two letters of the first term are third and fourth letters of the second term.
15. (a) As medicine cures sickness, in the same way, books remove ignorance.
16. (c) Bank is the land beside a river. Similarly, coast is the land beside a sea.
17. (d) As,                                      Similarly,  

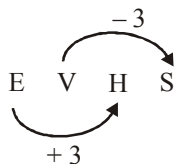
A $\xrightarrow{+7}$ H	M $\xrightarrow{+7}$ T
C $\xrightarrow{+6}$ I	O $\xrightarrow{+6}$ U
E $\xrightarrow{+7}$ L	Q $\xrightarrow{+7}$ X
18. (d) First two letters of the first term are in reverse order in the second term and so are the next two letters.
19. (d) First is the place where the second is imparted.
20. (d) Second is more intense than the first.
21. (d) Second term = (First term)<sup>3</sup>  
 $\therefore$  Fourth term = (Third term)<sup>3</sup>
22. (c) The words in each pair are synonyms.
23. (a) The largest ocean is Pacific Ocean. Similarly, the largest island is Greenland.
24. (d)  $12 = 3^2 + 3$ ,                       $30 = 5^2 + 5$  :  
 $20 = 4^2 + 4$  :                      ? =  $6^2 + 6$
25. (d)  $3 = 2^2 - 1$ ,                       $10 = 3^2 + 1$   
 $8 = 3^2 - 1$ ,                      ? =  $4^2 + 1$
26. (b) 13 and 19 are primes with 17 left out in between.
27. (d)  $48 = 7^2 - 1$ ,  $122 = 11^2 + 1$  :  
 $168 = 13^2 - 1$ , ? =  $17^2 + 1$
28. (b) The letters are consecutive and written in reverse order.
29. (a) C  $\xrightarrow{+3}$  F    I  $\xrightarrow{+6}$  O  
 J  $\xrightarrow{+3}$  M    K  $\xrightarrow{+6}$  Q  
 D  $\xrightarrow{+3}$  G    J  $\xrightarrow{+6}$  P  
 L  $\xrightarrow{+6}$  R    R  $\xrightarrow{+3}$  T
30. (a) In each group the first three letters are consecutive and they follows the fourth letter.
31. (a)
 

A B C D	O P Q R
E F G H	S T U V

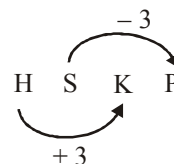
 Here B and D are skipped
32. (c) The second set EGC is formed by simply putting the first letter of CEG at last to form EGC, and so on.
33. (b) Because KLM are assigned No. 11, 12 & 13 from A onwards, this corresponds to PON, which are also numbered 11, 12 and 13 from Z to A in reverse order. Hence NOP will correspond to MLK.
34. (a) The three letters moved 5, 4, and 3 and steps forward respectively.
35. (d)  $211 \Rightarrow 2 + 1 + 1 = 4$  ] + 5  
 $333 \Rightarrow 3 + 3 + 3 = 9$  ] + 5  
 Similarly,  
 $356 \Rightarrow 3 + 5 + 6 = 14$  ] + 5  
 $388 \Rightarrow 3 + 8 + 8 = 19$  ] + 5
36. (c) Metre is a unit of length likewise watt is a unit of power.
37. (d) As cube is 3-D of square. Similarly sphere is 3-D of circle.
38. (b) As paper is product of Tree. Similarly glass is a product of sand.
39. (d) As, A    C    F    J    similarly, E    G    I    N  
           ↓    ↓    ↓    ↓                    ↓    ↓    ↓    ↓  
           Z    X    U    Q                    V    T    R    M

40. (a) As, Similarly  
 $A \xrightarrow{+3} D$   $Q \xrightarrow{+3} T$   
 $C \xrightarrow{+3} F$   $S \xrightarrow{+3} V$   
 $E \xrightarrow{+3} H$   $U \xrightarrow{+3} X$   
 $G \xrightarrow{+3} J$   $W \xrightarrow{+3} Z$
41. (d) As, Similarly  
 $E \xrightarrow{+1} F$   $F \xrightarrow{+1} G$   
 $G \xrightarrow{+2} I$   $H \xrightarrow{+2} J$   
 $I \xrightarrow{+3} L$   $J \xrightarrow{+3} M$   
 $K \xrightarrow{+4} O$   $L \xrightarrow{+4} P$
42. (b) The relationship is  $x : (x^2 - 9)$ .
43. (c) The relationship is  $x : x(x + 1)$
44. (b)  $50 = 20 \times 2 + 20/2$ , So  $100 \times 2 + 100/2 = 250$
45. (c) Sea sickness is to feel ill when you are travelling on a ship or boat.  
 Similarly, Giddiness is to feel that you are going to fall.
46. (c) Waitress is a person whose job is to serve customers in a restaurant.  
 Similarly, A teacher teaches students in a school.
47. (a)  $A \xrightarrow{R} O \xrightarrow{U} N \xrightarrow{D} \Rightarrow R A U O D N$   
 Similarly,  
 $G \xrightarrow{R} O \xrightarrow{U} N \xrightarrow{D} \Rightarrow R G U O D N$
48. (b)  $\boxed{APP} R O A C H E D \Rightarrow R O A C H E D \boxed{APP}$   
 Similarly,  
 $\boxed{BAR} G A I N E D \Rightarrow G A I N E D \boxed{BAR}$
49. (c)  $8 \times 8 = 64$ ,  $64 \times 4 = 256$   
 $10 \times 10 = 100$ ,  $100 \times 5 = 500$
50. (b)  $\frac{21}{3} = 7$   
 Similarly,  $\frac{574}{x} = 7$ ,  $x = \frac{574}{7} = 82$
51. (a) A saint practices meditation.  
 Similarly,  
 A scientist does research.
52. (d) A palace is the official home of a king.  
 Similarly,  
 An igloo is a small round house of an Eskima.
53. (c)  $A \xrightarrow{+5} F \xrightarrow{+5} K \xrightarrow{+5} P$   
 $D \xrightarrow{+5} I \xrightarrow{+5} N \xrightarrow{+5} S$   
 $W \xrightarrow{+5} B \xrightarrow{+5} G \xrightarrow{+5} L$   
 $O \xrightarrow{+5} T \xrightarrow{+5} Y \xrightarrow{+5} D$
54. (c)  $S \xrightarrow{-2} Q$  Similarly  $M \xrightarrow{-2} K$   
 $I \xrightarrow{-2} G$   $O \xrightarrow{-2} M$   
 $N \xrightarrow{-2} L$   $N \xrightarrow{-2} L$   
 $G \xrightarrow{-2} E$   $S \longrightarrow Q$   
 $E \xrightarrow{-2} C$   $T \longrightarrow R$   
 $R \xrightarrow{-2} P$   $E \longrightarrow C$   
 $R \longrightarrow P$
55. (c)  $18/3 - 1 = 5$   
 $12/3 - 1 = \boxed{3}$
56. (c) Haematology is the branch of medicine concerned with the study and prevention of diseases related to the blood.  
 Similarly, phycology is the scientific study of algae.
57. (c) A group of Lions is called a pride.  
 A group of Cats is called a clowder.
58. (a)  $M \xrightarrow{+3} P$   $A \xrightarrow{+3} D$   $N \xrightarrow{+3} Q$  Similarly,  $W \xrightarrow{+3} Z$   $A \xrightarrow{+3} D$   $N \xrightarrow{+3} Q$
59. (b)  $A \xrightarrow{+10} K$   $E \xrightarrow{+10} O$   $F \xrightarrow{+10} P$   $J \xrightarrow{+10} T$   
 Similarly,  
 $G \xrightarrow{-10} Q$   $K \xrightarrow{-10} U$   $L \xrightarrow{-10} V$   $P \xrightarrow{-10} Z$
60. (a)  $2^5 = 32$   
 $3^5 = 243$
61. (c)  $D \times H$   $M \times Q$   
 $4 \times 8$  Similarly,  $13 \times 17$   
 Respective place value of letters in English alphabet.  
 Hence, option (c) is the correct answer.
62. (c) All other numbers are in the form of  $n^2 + 4$  where  $n$  is a natural number.
63. (c) Except (c) others are birds whereas bat is a mammal
64. (d) Lack of first one causes second one.
65. (a) The rest are based on the expression  $x^2 + 1$ .  
 But  $126 = 11^2 + 5$ .
66. (c) After a close look you will get that except 360 each number is one more than square of a natural number, i.e.,  $226 = 15^2 + 1$ ;  $290 = 17^2 + 1$ ;  $170 = 13^2 + 1$ ;  $122 = 11^2 + 1$
67. (d) Except 'mustard' each belongs to the same category, viz food grains. Mustard is an oilseed.
68. (e) All others are held in the hand and not shot out.
69. (a) The rest are not squares of a number.
70. (b) All others are flight less change numbering birds while Eagle is not.
71. (c)  $72 = 9^2 - 9$   
 $42 = 7^2 - 7$   
 $152 = 12^2 + 8$   
 $110 = 11^2 - 11$   
 $156 = 13^2 - 13$   
 Except 152, others show the trend  $x^2 - x$ .

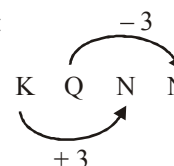
72. (c) All others are found in solid state while mercury is found in liquid state.
73. (e) The given numbers can be written as follows:  
 $143 = 12^2 - 1$ ;  $63 = 8^2 - 1$ ;  $195 = 14^2 - 1$ ;  
 $15 = 4^2 - 1$   
 But,  $257 = 16^2 + 1$   
 Obviously, except 257, others can be written in the form  $x^2 - 1$ .
74. (b) All except Direction spend money.
75. (e) Others are wild animals.
76. (c) Others are the products made from 'milk'.
77. (e) The digit-sums are as follows:  
 $131 \rightarrow 1 + 3 + 1 = 5$   
 $151 \rightarrow 1 + 5 + 1 = 7$   
 $181 \rightarrow 1 + 8 + 1 = 10 \rightarrow 1 + 0 = 1$   
 $171 \rightarrow 1 + 7 + 1 = 9$   
 $161 \rightarrow 1 + 6 + 1 = 8$   
 Only 161 has its digit-sum even.
78. (e) All others are specific feelings.
79. (b) Others represent sensation and respective organs. Here the order is reversed.
80. (c) 170 can be written as  $(13^2 + 1)$ . Similarly, 226, 290 and 362 can be written as  $(15^2 + 1)$ ,  $(17^2 + 1)$  and  $(19^2 + 1)$  respectively. In general, they can be written as  $(x^2 + 1)$ . But 120 is  $(11^2 - 1)$ .
81. (d) The following rule is followed in other pairs: The first, fourth and last letters of the first word are being replaced with two letters ahead in English alphabet in the second word and both pairs of letters between the first and fourth, and the fourth and last in the first word are interchanging between themselves in the second word. But in option (d), the fourth letter 'W' in the first word becomes Z in the second word, which should be Y.
82. (b)
- |              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| I            | S            | L            | O            | J            | L            | U            | O            | Q            | M            |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| +10          | -7           | +3           | -5           |              | +9           | -6           | +2           | -4           |              |
| A            | K            | D            | G            | B            | F            | P            | I            | L            | G            |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| +10          | -7           | +3           | -5           |              | +10          | -7           | +3           | -5           |              |
| N            | X            | Q            | T            | O            |              |              |              |              |              |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |              |              |              |              |              |
| +10          | -7           | +3           | -5           |              |              |              |              |              |              |
83. (c) Except it all others grow on trees.
84. (a) Except it all others are non-prime numbers.
85. (d) Except it other numbers are either 1 less or 1 more than a perfect square number.
86. (e) Chicken is young one of hen.
87. (e) In all others, the digit indicates the gap between the two letters.
88. (b) Except (b), all others are principles of society.
89. (a) Option (b):



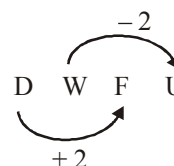
Option (c):



Option (d):



Option (a):



Hence, option (a) is the group of odd letters.

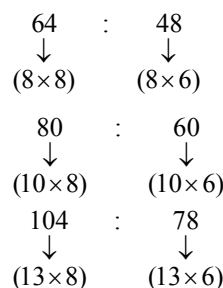
90. (d) Option (a):  $C \xrightarrow{-1} B \xrightarrow{+3} E \xrightarrow{+1} F$ Option (b):  $E \xrightarrow{-1} D \xrightarrow{+3} G \xrightarrow{+1} H$ Option (c):  $I \xrightarrow{-1} H \xrightarrow{+3} K \xrightarrow{+1} L$ Option (d):  $G \xrightarrow{-1} F \xrightarrow{+1} H \xrightarrow{+1} J$ 

Hence, option (d) is the odd group of letters.

91. (d)  $4 + 0 + 2 + 5 = 11$  $6 + 0 + 2 + 3 = 11$  $7 + 2 + 0 + 2 = 11$  $5 + 0 + 6 + 1 = 12$ 

Hence, (d) is the odd one out.

92. (a)



Hence, option (a) is odd one out

93. (d) Radio, Transistor and television are the way of broadcasting. Hence, tube is odd one out.

94. (b) As all terms given in question are medical terms except geology.

95. (d)

96. (d) All except Ellora are famous for temples, while Ellora is famous for caves.

97. (c) Fervent: having or displaying a passionate intensity.  
 Enthusiastic: having or showing intense and eager enjoyment.

Ardent: very enthusiastic or passionate

Apathetic: showing or feeling no interest, enthusiasm or concern.

Hence, apathetic is odd one out.